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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BOSTON, MA 02110

EXAMINER

TSEGAYE, SABA

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/730,513

Applicant(s)

WIRYAMAN ET AL.

Examiner

Saba Tsegaye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, the phrase “where examining network layer” lacks antecedent basis.

In claim 6, the phrase “ the destination network layer..” lacks antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

4. Claims 1-4, 10, 11, 14-16, 19, 20 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Nichols (US 6,608,816).

Regarding claims 1 and 19, Nichols discloses, in Figs. 1 and 2, a method for processing communication in a communication device (130) having a first interface (205) and a second interface (230) comprising:

accepting data packets at the first interface (205) (column 5, lines 20-52);

for each accepted packet, identifying one of a plurality of classes of data flows associated with the packet (column 5, lines 40-62);

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for at least some of the accepted packets queuing the packets according to the identified class for the packet (column 5, line 54-column 6, line 30); and

transmitting the accepted packets from the second communication interface according a policy for priority and bandwidth allocation associated with the plurality of classes of data flows (column 6, lines 31-40).

Regarding claim 2, Nichols discloses the method wherein identifying the class of data flows includes examining network layer addressing data in the accepted packet (column 3. lines 59-64; column 5, lines 20-30).

Regarding claim 3, Nichols discloses the method wherein examining network layer addressing data includes identifying destination network layer addresses of the packets (column 3. lines 59-64; column 5, lines 20-30).

Regarding claim 4, Nichols discloses the method wherein identifying the class of data flows includes examining application layer data in the packets (column 5, lines 20-30).

Regarding claims 10, 11, 14-16, 20 and 23, Nichols discloses the method wherein the communication device communicates with devices over the first interface and the second interface as a data link layer bridge (column 4, lines 50-58).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-9, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols in view of Epstein et al. (US 6,684,329).

Nichols discloses all the claim limitations as stated above except for: passing the accepted packets to a proxy application hosted in the communication device and queuing records associated with the accepted packets.

Epstein teaches, in Figs. 2 and 4, a proxy server that includes a plurality of proxy applications such as HTTP, SMTP, FTP... (as in claims 5-8 and 21) (column 3, lines 13-35; column 6, lines 18-65). Fig. 5 illustrates the components of a multi-part proxy 510 (column 7, line 66-column 8, line 55) (as in claim 22). Further, Epstein teaches, in Fig. 7, queuing and dequeuing components (as in claim 9).

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a proxy application, such as that suggested by Epstein, in the communication device of Nichols in order to increase a network security.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols in view of Kloth (US 6,598,034).

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Nichols discloses all the claim limitations as stated above except for a graphical user interface.

Kloth teaches a method and apparatus for classifying data packets and processing them to a set of rules. Further, Kloth teaches that the rules can be edited or developed via an appropriate graphical interface.

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a graphical user interface, such as that suggested by Kloth, in the communication device of Nichols in order to provide interaction for entering and revising the rules (column 9, lines 30-36).

8. Claims 17, 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols in view of Frey (4,245,343).

Nichols discloses all the claim limitations as stated above except for directly connecting the first interface to the second interface in the event of a fault at the communication device (as in claims 17 and 18) and a hub for coupling the first interface to both the second interface (as in claim 24).

Regarding claims 17 and 18, Frey teaches a system that automatically bypassing an inoperative data terminal (column 4, lines 33-41).

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a system that directly connects the first and the second interface, such as that suggested by Frey, in the system of Nichols in order to provide a means for bypassing an inoperative terminal as well as providing for non-disruptive communication system.

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Regarding claim 24, Nichols in view of Frey does not expressly disclose a hub.

However, It would have been obvious to one ordinary skill in the art at the time the invention was made to add a hub in the system of Nichols in view of Frey in order to provide a common connection to all devices on the network

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Raisanen et al. (US 6,633,540) discloses a real-time traffic shaper with keep-alive property for best-effort traffic.

Kikki et al. (US 6,549,514) discloses a method and apparatus for shaping traffic for a SIMA network.

Pashtan et al. (US 6,542,466) discloses a method and apparatus for controlling quality of communication services in a communication network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (703) 308-4754. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST

March 12, 2004


JOHN PEZZLO
PRIMARY EXAMINER